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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION N
10/083,580	02/27/2002	Benoit Saillet	P21995	5891
7055	7590	10/01/2004	EXAMINER	
GREENBLUM & BERNSTEIN, P.L.C.			MUROMOTO JR, ROBERT H	
1950 ROLAND CLARKE PLACE			ART UNIT	PAPER NUMBER
RESTON, VA 20191			3765	

DATE MAILED: 10/01/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/083,580

Applicant(s)

SAILLET ET AL.

Examiner

Robert H Muromoto, Jr.

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 March 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

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DETAILED ACTION

Priority

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 9 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 9 recites "LYCRA®", this recitation is improper as it is a trademark and considered improper for US patent practice. The recitation should be replaced with the general terminology rather than the trademark name.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-3, 5-8, 10, 11, and 15-19 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Middleton US patent 5,787,502.

Middleton discloses a thermoinsulative protective garment. "As shown in detail in FIG. 2, the first garment part 2 is formed of a conventional fabric 4 coated on one surface

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(preferably the inner surface in the made-up garment, i.e. the surface directed towards the second garment part 3) with a polymer layer 5, e.g. a polyurethane.

The fabric 4 of the first garment part 2 is vapour permeable and waterproof and preferably has one or more of the following additional properties: durability, heatproofness, fireproofness, chemicalproofness, resistance to biological and radiation dehydration or damage, launderability and machinability. Such properties can be conferred and/or enhanced by conventional treatments applied to the fabric, as will be readily understood by a worker of ordinary skill in this art.

The garment parts 2 and 3 are sealingly bonded to each other at least at the aperture(s) of the garment (as discussed in more detail below, with reference to FIG. 5) so as to contain **a layer of air 6 between the garment parts.**

The second garment part 3 comprises a thermoinsulative fabric sheet 7 and a porous woven fabric (e.g. cotton) layer 8 bonded to the sheet 7 to provide a soft surface in contact with the wearer's skin. Bonding is achieved via conventional adhesives. (additional intermediary piece as recited in claim 3)

The preferred thermoinsulative fabric sheet 7 is the commercially available STOMATEX (.TM.) fabric (St. Albans Rubber Limited, Stanley, County Durham, England). It comprises a substantially impermeable closed-cell neoprene sheet of thickness about 5 mm... (col. 5, line 50-col. 6, line 12)."

These citations directly from Middleton show a multilayered garment useful as a wet suit or survival garment. The layers are bondingly attached at the perimeter openings of the suit (ankles, wrists, neck) which would provide the structure recited by the instant invention where

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the inner layer is relatively tight to the skin and the second layer is movable with respect to the inner layer since the layers are only attached at the perimeter openings and that the inner layer is attached to the inner surface of the outer layer at identical size perimeters.

The citations also show the limitations of claim 5, since the entire suit has the air inbetween the layers it would inherently be arranged opposite the joints of the body as recited in the claim.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 10, 12, 13 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Middleton.

Although Middleton discloses the limitations of the claims above Middleton does not specifically teach heat sealing or that the outer layer be made of neoprene material.

However, Middleton does teach that the layers are "sealingly bonded" to each other. This teaching would include the recited "heat sealing" limitation as "heat sealing" would produce a seam that is "sealingly bonded". Heat sealing and sealingly bonded are considered to be structural equivalents to each other as they both describe bonds on wet suits that require a waterproof sealed bond between the layers. Therefore it would have been obvious to one of ordinary skill in the art at the time of invention to use a "heat seal" bond which is the functional equivalent to a "sealingly bonded" seam.

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With respect to the use of neoprene as the outer material, the Middleton reference speaks directly to the outer layer being a polyurethane (elastomeric) coated fabric which can be manipulated with any number of coatings or treatments to attain the desired properties for a given application of the suit. Middleton goes on to state the use of neoprene in the inner fabric layer. The examiner holds that since Middleton teaches the use of neoprene and its favorable properties for the inner layer, it would have been an obvious variant of Middleton to use a neoprene or neoprene associated layer in the outer layer fabric since the advantages of neoprene are clearly taught and used already in the inner layer. Additionally, Middleton has already taught that any suitable coatings could be used on the outer layer, this teaching could be used to add any additional property requirements to a neoprene outer layer.

Claims 4 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Middleton in view of Hunter.

Although Middleton teaches essentially all of the limitations of the instant invention, Middleton does not specifically teach a yoke structure made of LYCRA®, or neoprene.

However, LYCRA® and neoprene are widely used materials for wetsuits as can be shown in Middleton which makes use of neoprene and LYCRA® or spandex materials, which are considered equivalent materials.

Therefore it would have been obvious to one of ordinary skill in the art to use a LYCRA® or neoprene material in the construction of an aquatic sports garment.

Hunter teaches a neoprene wetsuit with a neck entry system that uses an elastic back panel (yoke) 26 that is connected to inner portions of the suit just at the periphery of the panel 26. The panel 26 allows sufficient expansion (bending) to permit entry to the suit while ensuring a watertight seal when closed.

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Therefore it would have been obvious to one of ordinary skill in the art at the time of invention to use a yoke panel structure to provide a wetsuit with areas of higher expansion (bending) while still ensuring a water tight seal.

Claims 14 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Middleton in view of Hunter as applied to claims above, and further in view of Bolton.

With respect to the recitations of claims 14 and 20, the structure recited is that of functional folds for bending and an underlying layer fixed on the outer layer, which is provided by Bolton to provide protection to the inner layer. The additional limitations of claim 10 are not structural limitations. Rather they are process limitations, which would imply a product by process claim.

"The lack of physical description in a product-by-process claim makes determination of the patentability of the claim more difficult, since in spite of the fact that the claim may recite only process limitations, it is the patentability of the product claimed and not of the recited process steps which must be established. We are therefore of the opinion that when the prior art discloses a product which reasonably appears to be either identical with or only slightly different that a product claimed in a product-by-process claim, a rejection based on either section 102 or section 103 of the statute is eminently fair and acceptable. As a practical matter, the Patent Office is not equipped to manufacture products by the myriad of processes put before it and then obtain prior art products and make physical comparisons therewith." *In re Brown*, 459 F.2d 531,535,173 USPQ 685,688 (CCPA 1972).

Therefore it would have been obvious to one of ordinary skill in the art to modify the suit of Middleton to include folds in the outer layer that would provide protection during movement by the user to the inner layer of the suit, as it is recited by the instant invention.

Response to Arguments

Applicant's arguments with respect to claims 1-20 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert H Muromoto, Jr. whose telephone number is 703-306-5503. The examiner can normally be reached on 8-530, M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Calvert can be reached on 703-305-1025. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Bhm
September 30, 2004


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